output from the amplifier after it is run through a frequency to voltage converter. See FIG. 13. The FVC will take the DC portion of the output signal and convert it into a tone. The pitch will vary as the sensor is pressed harder, thus resulting in frequency as an indicator the applied force. Thus, mixing signal with the dynamic output, the medical practitioner will be able to perceive both static and dynamic forces. --

In the Claims

Please **cancel** claims 1-60, without prejudice.

Please **add** claims 61 - 107.

61. (New) A surgical device comprising:

a sensor element for detecting dynamic and static forces imparted on the device, wherein non-visual information relating to these forces is communicated to a user of the device.

62. (New) The device of claim 61 wherein the sensor element detects a physical interaction of the device with the environment, electrical properties of the environment or a spatial relation of the device with the environment.

63. (New) The device of claim 61 wherein information relating to forces imparted on the device preferably is amplified and then communicated to the user.

64. (New) The device of claim 61, wherein the non-visual information is tactile or auditory.

65. (New) The device of claim 61, wherein the sensor element transmits an electrical signal

in response to forces imparted on the device.

66. (New) The device of claim 61, wherein the sensor element generates electrical signals based on forces imparted at a distal end of the device.

67. (New) The device of claim 61, wherein the device is adapted for a microsurgery procedure.

68. (New) The device of claim 61, wherein the device is adapted for an ophthalmic procedure.

69. (New) The device of claim 61, wherein the device is adapted for neurosurgery.

70. (New) The device of claim 61 wherein the device comprises a sensor element for sensing forces imparted along a substantial length of the device.

71. (New) The device of claim 61, wherein the sensor element generates a proportional signal in response to a force on the device, wherein the strength of the signal is proportional to the amount of force on the device.

72. (New) The device of claim 71, wherein the device further comprises an electronic controller for generating an output signal based on the proportional electrical signal.

73. (New) The device of claim 72, wherein the device further comprises an output transducer for receiving the output signal, wherein the output transducer produces a sensory signal proportional to the amount of force imparted on the device.

74. (New) The device of claim 73, further comprising an energy conducting apparatus for transmitting the output signal from the electronic controller to the output transducer

75. (New) The device of claim 73, wherein the output transducer is any one of a speaker, earphone or headphone.

76. (New) The device of claim 61, wherein the output transducer is an electromechanical transducer.

77. (New) The device of claim 76, wherein the electromechanical transducer is attached to a grip portion of the device.

78. (New) The device of claim 76, wherein the electromechanical transducer is attached to a medical practitioner that uses the device.

79. (New) The device of claim 61 further comprising a mechanism that transmits electric signals from the sensor element to the electronic controller.

80. (New) The device of claim 61, further comprising a power source for the device.

81. (New) The device of claim 80, wherein the power source is connected to the device through an electrical cable.

82. (New) The device of claim 61, wherein the device comprises a battery.

83. (New) The device of claim 68, wherein the sensor element comprises a piezopolymer.

84. (New) The device of claim 83, wherein the piezopolymer generates an electric signal when flexed that is proportional to the degree of flexion.

85. (New) The device of claim 61, wherein the sensor element comprises a strain gauge contained within, or attached to, the shaft.

86. (New) The device of claim 72, wherein the electronic controller operates under control of a microprocessor.

87. (New) The device of claim 86, wherein the microprocessor provides an ability to adjust the sensitivity and threshold of operation of the device.

88. (New) The device of claim 61, wherein the surgical device is self contained.

89. (New) The device of claim 61, wherein the device can be sterilized.

90. (New) The device of claim 61, wherein one or more parts of the device are modular.

91. (New) The device of claim 90, wherein the one or more parts are disposable.

92. (New) The device according to claim 90, wherein the one or more parts are reuseable.

93. (New) The device according to claim 61, wherein the device senses impedance or magnetic flux in the environment.

94. (New) The device of claim 61, wherein the device senses proximity and/or contact with a tissue.

95. (New) The device of claim 61, wherein the device comprises a shaft having a distal end and a handle and wherein the sensor is place between the shaft and the handle.

96. (New) The device of claim 95, wherein the handle is rigid.

97. (New) The device of claim 61, wherein the device comprises a shaft and the sensor is imbedded within the shaft.

98. (New) The device of claim 61, wherein the device comprises a disposable tip.

99. (New) A method of performing a medical procedure, comprising bring a device according to claim 61, into proximity with a tissue and sensing static and/or dynamic forces on the device.

100. (New) The method of claim 99, further comprising the step of guiding the movement of the device based on non-visual information received in response to the sensing.

101. (New) The method of claim 99 or 100, further comprising manipulating the tissue of a patient with the device.

102. (New) The method of claim 101, wherein the tissue is neurological tissue.

103. (New) The method of claim 101, wherein the tissue of a patient's eye is manipulated.

104. (New) The method of claim 99, wherein the medical procedure is a surgical procedure.

105. (New) The method of claim 99 or 100, wherein non-visual information is transmitted in real time to a user of the device.

106. (New) The method of claim 105, wherein non-visual information which is tactile and/or auditory is transmitted to a user of the device.

105. (New) The method of claim 97, where signals corresponding to forces on the device are amplified and communicated to a device user.

106. (New) The method of claim 105, wherein the signals are electrical signals.

107. (New) A kit comprising a device of claim 61, packaged in a sterile form.

Pending claims

Claims 1-60 are pending. Upon entry of this amendment and response, claims 61-107 are presented for examination. No new matter is provided by this amendment. Support for the claims may be found throughout the specification and at least in the claims as originally filed.

Objection to the Drawings

The Drawings are objected to because the Examiner asserts that reference numbers should be added to Figures 1, 2 and 7-14 and text should be removed from Figures 8 and 9. Accordingly, amended Figures are attached herewith showing proposed changes in red. Additionally, the Examiner states that an additional figures legend must be added to the "subfigure" of Figure 8. Upon Examiner's approval of the amended drawings, Applicants will

obtain formal drawings for all of the Figures.

Objection Regarding Multiple Dependent Claims

The Examiner has objected to certain claims for being improperly multiply dependent. Applicants respectfully submit that the rejection is moot in view of the cancellation of the claims and respectfully requests that the rejection be reconsidered and withdrawn.

Objection to Claims 1-4, 12-16, and 21-23

The claims are objected to over the recitation of various terms. Applicants respectfully submit that the objection is moot in view of the cancellation of claims 1-4, 12-16, and 21-23 and respectfully requests that the objection be reconsidered and withdrawn.

Rejection of Claim 22 Under 35 U.S.C. § 112 Second Paragraph

The Examiner states that claim 22 is indefinite because of failure to include a period. Applicants respectfully submit the rejection is moot in view of the cancellation of claim 22 and respectfully requests that the rejection be reconsidered and withdrawn.

Applicants respectfully submit the rejection is moot in view of the cancellation of the claims and respectfully request that the rejection be reconsidered and withdrawn.

Rejection of Claims 1-4, 12-16, 21-23 and 44 Under 35 U.S.C. § 102(b)

Claims 1-4, 12-16, 21-23 and 44 are rejected under 35 U.S.C. § 102(b) as being anticipated by SU733670 ("the '670 publication"). The Examiner asserts that the '670 publication discloses a surgical instrument comprising a strain gauge which allegedly changes an audible tone or sound volume on detecting pressure from the strain gauge.

Applicants respectfully submit that the rejection is moot in view of the cancellation of the claims; however, to the extent the rejection would be applied against the newly added claims; Applicants traverse the rejection. Newly added claims 61-107 recite that the device must be able to detect *both* dynamic and static forces on the device. The '670 publication does not disclose a device which detects dynamic forces. Further, the publication does not disclose features of the dependent claims, minimally, such as: the detection of electrical properties of the environment or a spatial relationship of the device with the environment; providing non-visual information which is tactile information; a sensor element for sensing forces along the length of the device; an electromechanical transducer, a piezopolymer which may flex and which can produce a signal proportional to the degree of flexion; a device with modular components which may be disposable or reuseable, or a device which senses impedance or magnetic flux in the environment.

Accordingly, Applicants submit that the rejection would be improper as applied to the added claims because the '670 publication does not teach each element of the claims as required by section 102 of the Patent Act. See *In re Marshall*, 198 USPQ 344, 346 (CCPA 1978) ("[r]ejections under 35 U.S.C. §102 are proper only when the claimed subject matter is identically disclosed or described in the prior art."). Therefore, Applicants respectfully request that the rejection be reconsidered and withdrawn.

Other References

The Examiner has cited a number of patents and patent publications but has not applied any rejections over the claims in view of these documents. Therefore, Applicants consider that the Examiner has determined that the references neither anticipate nor render obvious the invention as claimed. Applicants respectfully submit that this still holds true with respect to the newly added claims - none of the references teach detecting both dynamic and static forces